



Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Stephanie Pollack, MassDOT Secretary & CEO



Application to Test Autonomous Vehicles (AVs) on Public Ways in Massachusetts

- Purpose: This document, accompanying supplements, the MOU, and the signed certification constitute an Application to Test Autonomous Vehicles (AVs) on public ways in the Commonwealth of Massachusetts, including public ways controlled by state agencies and any municipality or political subdivision which agrees to AV testing on ways under its control.
- An Applicant who desires to test AVs in Massachusetts must review and understand the policy issued September 2017 by the National Highway Traffic Safety Administration (NHTSA) entitled Automated Driving Systems: A Vision for Safety and Executive Order No. 572 issued by Governor Baker on October 20, 2016.
- If the Massachusetts Department of Transportation (MassDOT) approves this application, it will issue an approval to test motor vehicles with levels of automation defined by SAE International, ranging from SAE Level 3 to SAE Level 5¹. The “lead agency” (MassDOT) may approve testing at SAE Levels 3, 4 and 5 (Autonomous Vehicles or AVs) when it is satisfied that:
 - a. the Applicant is a responsible and capable “manufacturer” or “other entity” qualified to road test vehicles equipped with various levels of automation on public ways;
 - b. the prior testing conducted by the Applicant was conducted in a safe and efficient manner and did not unnecessarily endanger other vehicles, the driving public, pedestrians, or public or private property; and
 - c. based upon the application and the results of previous testing, further testing of AVs is reasonably expected to be conducted safely and efficiently.
- For purposes of such testing on public ways in the Commonwealth per Executive Order No. 572, the Massachusetts Department of Transportation (MassDOT) is designated the lead agency². Only approval issued by MassDOT shall authorize testing of AVs on public ways. The MassDOT AV Review Committee shall review and approve or deny any Application and any motor vehicle, driver or AV testing proposal. The Review Committee may also address any other issues, requests or controversies that arise in the course of testing or review.

¹ http://standards.sae.org/j3016_201609/

² <http://www.mass.gov/courts/case-legal-res/law-lib/laws-by-source/exec/eo550-599.html>

- Memorandum of Understanding: An Applicant for Approval to Test Autonomous Vehicles (AVs) on the public ways of Massachusetts is required to enter into a Memorandum of Understanding (MOU) with the “Lead Agency” (MassDOT) before any Application for AV testing is considered. In addition, if the Applicant intends to do AV testing on public ways under the control of state agencies, municipalities or other political subdivisions of the Commonwealth, the Applicant may be required to seek approval for such testing from the governmental entities controlling those public ways. MassDOT will not provide approval for AV testing on public ways controlled by other government entities if any requirements of those entities are inconsistent with the requirements of this Application, including the Memorandum of Understanding (MOU).
- Timeline for Processing Applications: If an Application is complete, the Review Committee will review the Application in detail and provide approval, rejection, or request for more information within 30 business days. If the Committee requires additional information to assess the Application, the Applicant should submit such information or relevant explanation of such omission from the Application within 15 business days, and the Committee will review and respond within 15 business days of receipt of the additional information. MassDOT reserves the right to withdraw an approval at any time, and to request a meeting with the Applicant prior to issuing an Approval to Test.



Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Stephanie Pollack, MassDOT Secretary & CEO



APPLICANT INFORMATION:

- **Name of Organization Applicant:** _____
- **Street Address of Company's Headquarters Office:** _____
- **City, Town of Headquarters Office:** _____ **State** _____ **Zip Code** _____ **Country** _____
- **Mailing Address of Headquarters Office (if different):** _____
- **Name of AV Testing Program Director at Headquarters Address:** _____
- **Title:** _____ **Email Address:** _____ **Tel. No.:** _____

PHYSICAL PRESENCE IN MASSACHUSETTS:

- **Name of Organization Applicant:** _____
- **Street Address of Company's MA Office:** _____
- **City, Town of MA Office:** _____ **State** _____ **Zip Code** _____ **Tel. No.** _____
- **Mailing Address of MA Office (if different):** _____
- **Name of AV Testing Program Director at MA Address:** _____
- **Title:** _____ **Email Address:** _____ **Tel. No.:** _____

ORGANIZATION TYPE:

____ **Manufacturer:** An individual or company that manufactures AV's for testing and deployment on public roadways. It includes "original equipment manufacturers" (OEMs), "multiple and final stage manufacturers," "alterers" (individuals or companies making changes to a complete vehicle prior to first retail sale or deployment) and "modifiers" (individuals or companies making changes to existing vehicles after first retail sale or deployment).

____ **Other Entity:** An individual or company that is not a manufacturer, and is involved with designing, supplying, testing, selling, operating, deploying, or helping to manufacture AVs.

CERTIFICATION:

The Applicant understands and agrees that this Application is complete and will be reviewed when this form is completed and signed by the proper person, all required Supplements are completed, any required documents are attached, and a Memorandum of Understanding (MOU) is entered into between MassDOT and the Applicant.

Signature of Applicant's Representative

Printed Name

Date of Signing

Position and Title

Email address

Tel. No.:

SUPPLEMENTAL INFORMATION:

Supplement # 1: Experience with Autonomous Vehicles

Please provide information generally describing the Applicant's business as a "Manufacturer" or "Other Entity" of AVs as self-identified above. Please include:

- i. a brief history of the Applicant's business as regards AVs;
- ii. a summary of the Applicant's experience in "off-road" testing of AV's on private facilities (closed to the public), and include the approximate number of miles and/or hours of testing completed, the types of vehicles used for such testing, the SAE Levels at which the vehicles were tested, the operational design domains which were tested (including but not limited to the roadway types, geographic areas, speed ranges, and environmental conditions), and the results of the testing;
- iii. a summary of the Applicant's experience in "on-road" testing of AV's on public ways while the road was open to other motorists, and include the approximate number of miles and/or hours of testing completed, the types of vehicles used for such testing, the SAE Levels at which the vehicles were tested, the general location of the road testing, the operational design domains which were tested, the identity of the governmental entity that approved and/or monitored the testing, and the results of the testing;
- iv. a description and summary of any crashes (regardless of the degree of seriousness) that resulted during testing of AVs by the Applicant, whether on "off-road" or "on-road" courses, a description of the nature of physical damage to the vehicle or vehicles and or other personal or private property, whether any personal injuries occurred as a result of the crash(es), the seriousness of those injuries, whether any fatalities resulted and whether an official report of the crash or crashes were reported to police or other governmental agencies, and if a report or reports were filed, to whom they were filed; and
- v. if the Applicant is currently testing AVs in other jurisdictions, a summary of where testing is taking place and whether it has an agreement or agreements in place to test AVs in other jurisdictions at a future date.

Supplement # 2: Applicant's Safety Assessment for Testing Vehicles

Attach a safety assessment for testing the vehicles in accordance with NHTSA's Vehicle Performance Guidance, or similar documentation which addresses the safety issues contained therein. This assessment should include a "self-certification" of testing for the technology in the test vehicles under controlled conditions that simulate the real-world conditions. These conditions include various weather and various types of roads, different times of the day and night, etc., to which the Applicant intends to subject the vehicle on public ways in Massachusetts. Applicants should not disclose any confidential information or other material considered to be trade secrets.

Supplement # 3: Initial Driving Plan

The Applicant must define the specific geographical areas and roads on which testing will occur, and the Operational Design Domain(s) in which the testing will occur, including but not limited to roadway types and environmental conditions.

Supplement # 4: Motor Vehicles in AV Testing Program

Attach a photocopy of the vehicle registration form for each vehicle to be used in the AV testing program. If the Title number for the motor vehicle is not displayed on the registration itself, please provide a photocopy of the Title.

Each vehicle used for testing should follow the Performance Guidance set forth by NHTSA and meet applicable Federal Motor Vehicle Safety Standards, or provide a waiver or exemption from NHTSA, unless otherwise approved by MassDOT.

Supplement # 5: Drivers in Testing Program

Attach a photocopy of the current driver's license of each person who has been designated to operate an AV in Massachusetts by the Applicant.

The Applicant shall ensure that while the AVs are operated without human piloting, drivers trained and experienced in the operation and control of AVs who possess a valid driver's license and have clean driving records must be seated and secured in the driver seats of such AVs and available and able to take command of the AVs as needed.

Each operator of a vehicle used in an AV test on a public way or a way to which the public has a right of access as invitees shall be at least 21 years of age, possess a valid driver's license and have driving records free of any pending cases or convictions for operation of a motor vehicle while under the influence of alcohol or drugs, which shall include any cases that were disposed of under Chapter 90, Section 24D or equivalent if the offense occurred in another jurisdiction.

If the Applicant uses a driver licensed in another state, it shall provide a copy of the license and a certified copy of the driving record (no more than 30 days old) of the driver.

Supplement # 6: Summary of Training

Attach a summary of the types of training provided to employees, contractors and/or other persons designated by the Applicant as operators of the AV test vehicles.

Supplement # 7: Insurance Requirement

Attach a copy of the policy of insurance or a surety bond in the amount of a minimum of \$5,000,000 issued by a company licensed to do business by the Commissioner of Insurance of the Commonwealth of Massachusetts. The policy or bond shall be for the purpose of satisfying any judgment or judgments for damages for personal injury, death or property damage caused by a vehicle being tested in the Commonwealth.